

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-70. (canceled)

71. (new) A method for the treatment of a disease or of a lesion involving cellular apoptosis, reduction of the survival of cells and/or destruction of cells, comprising the administering of an appropriate amount of:

- macrophages or
- macrophage-conditioned medium or
- macrophages and macrophage-conditioned medium.

72. (new) The method according to claim 71 for the improvement of survival of a first type of cells, for the treatment of a disease or of a lesion involving the destruction of a second type of cells or of a tissue containing said second type of cells, said first type of cells being chosen among the group consisting of precursor cells and stem cells, said second type of cells being chosen among the group consisting of precursor cells, stem cells and any type of differentiated cells, comprising treating said cells with macrophages.

73. (new) The method according to claim 71 for the improvement of survival of a first type of cells, for the treatment of a disease or of a lesion involving the destruction of a second type of cells or of a tissue containing said second type of cells, said first type of cells being chosen among the group consisting of precursor cells and stem cells, said second type of cells being chosen among the group consisting of precursor cells, stem cells and any type of differentiated cells, comprising culturing said cells in a macrophage-conditioned medium.

74. (new) The method according to claim 72, for the treatment of one or several focal lesions wherein said first type of cells is to be grafted into a mammal.

75. (new) The method according to claim 73, for the treatment of one or several focal lesions wherein said first type of cells is to be grafted into a mammal.

76. (new) The method according to claim 72, wherein said first type of cells and/or macrophages are autologous for said mammal.

77. (new) The method according to claim 73, wherein said first type of cells and/or macrophages are autologous for said

mammal.

78. (new) The method according to claim 71, for the treatment of bone or of muscular lesion, or for the treatment of cardiac lesion, said cardiac lesion being possibly myocardial infarction, coronary thrombosis, dilated cardiomyopathy or cardiomyocyte dysfunction subsequent to, or resulting from, a genetic defect.

79. (new) The method according to claim 72, wherein macrophages act as a inhibitors of apoptosis of said first type of cells by cell to cell contact between the surface of respectively said macrophages and said first type of cells.

80. (new) The method according to claim 73, wherein said first type of cells and/or macrophages are autologous for said mammal.

81. (new) The method according to claim 72, wherein macrophages act as a stromal support for said first type of cells.

82. (new) The method according to claim 73, wherein macrophages act as a stromal support for said first type of cells.

83. (new) The method according to claim 72, wherein said first type of cells is chosen among a group consisting of: myogenic precursor cells, endothelial precursor cells, hematopoietic precursor cells, bone marrow precursor cells, mesenchymal precursor cells, neuronal precursor cells and multipotent adult stem cells.

84. (new) The method according to claim 73, wherein said first type of cells is chosen among a group consisting of: myogenic precursor cells, endothelial precursor cells, hematopoietic precursor cells, bone marrow precursor cells, mesenchymal precursor cells, neuronal precursor cells and multipotent adult stem cells.

85. (new) A method of preparation of a composition to be grafted into a mammal, comprising administering a composition containing:

- macrophages or
- macrophage-conditioned medium or
- macrophages and macrophage-conditioned medium,

and at least one first type of cells,
in association with a pharmaceutically acceptable vehicle,
said first type of cells being chosen among the group
consisting of: precursor cells and stem cells.

86. (new) The method of preparation of a composition to be grafted into a mammal according to claim 85, wherein said first type of cells are autologous to said mammal or wherein said first type of cells are myogenic precursor cells.

87. (new) The method of preparation of a composition to be grafted into a mammal according to claim 85, for the treatment of a disease or of a lesion involving the destruction of cells, or for the treatment of one or several focal lesions or for the treatment of bone or muscular lesion, or for the treatment of cardiac lesion, said cardiac lesion being possibly myocardial infarction, coronary thrombosis, dilated cardiomyopathy or cardiomyocyte dysfunction resulting from a genetic defect.

88. (new) The method of preparation of a composition to be grafted into a mammal according to claim 85, wherein said composition contains from about $0.5 \cdot 10^8$ to about $7.5 \cdot 10^8$ macrophages and from about $0.5 \cdot 10^8$ to about $7.5 \cdot 10^8$ of said first type of cells.

89. (new) A pharmaceutical composition containing at least one first type of cells, said first type of cells being possibly
-precursor cells or stem cells, and macrophages, or
-precursor cells or stem cells, and macrophage-

conditioned medium,
in association with a pharmaceutically acceptable vehicle.

90. (new) The pharmaceutical composition according to claim 89, wherein said first type of cells is chosen among a group consisting of : myogenic precursor cells, endothelial precursor cells, hematopoietic precursor cells, bone marrow precursor cells, mesenchymal precursor cells, neuronal precursor cells and multipotent adult stem cells.

91. (new) The pharmaceutical composition according to claim 89, wherein the ratio between said first type of cells and macrophages, as expressed in number of cells, is comprised between about 1/10 and about 10/1, and is preferably of about 1/1.

92. (new) The pharmaceutical composition according to claim 89, wherein the percentage of macrophages, expressed in relation to the total number of cells in the composition, is from about 5% to about 70%, and more preferably from about 20% to about 50%, and more preferably of about 35%.

93. (new) The pharmaceutical composition according to claim 89, containing frozen precursors cells or stem cells on one hand and frozen macrophages on other hand, in pharmaceutically

acceptable cryopreservant and vehicle.

94. (new) The pharmaceutical composition according to claim 89, containing macrophages and myogenic precursor cells.

95. (new) The pharmaceutical composition according to claim 89, containing macrophage-conditioned medium and myogenic precursor cells.

96. (new) The pharmaceutical composition according to claim 89, containing macrophages and myogenic precursor cells or containing macrophage-conditioned medium and myogenic precursor cells, wherein the ratio between macrophages and myogenic precursor cells, as expressed in number of cells, is comprised between about 1/10 and about 10/1, and preferably of about 1/1.

97. (new) The pharmaceutical composition according to claim 89, containing macrophages and myogenic precursor cells or containing macrophage-conditioned medium and myogenic precursor cells, wherein the percentage of cells, expressed in relation of the total number of cells in the composition, is comprised from about 10% to about 80% of macrophages, more preferably about 50%, and from about 10% to about 80% of myogenic cell precursor cells, more preferably about 50%.

98. (new) The pharmaceutical composition according to claim 89, containing from about 0.5×10^8 to about 7.5×10^8 and preferably from about 1.5×10^8 to about 2.5×10^8 macrophages.

99. (new) The pharmaceutical composition according to claim 89, containing macrophages and myogenic precursor cells or containing macrophage-conditioned medium and myogenic precursor cells, containing from about 0.5×10^8 to about 7.5×10^8 and preferably from about 1.5×10^8 to about 2.5×10^8 myogenic precursor cells.

100. (new) A binary complex made of a myogenic precursor cell and a macrophage, interacting by cell to cell contacts between surface receptors on the surface of, respectively, macrophage and myogenic precursor cell.

101. (new) The binary complex according to claim 100, wherein cell to cell contacts are mediated, at least partly, via cell surface molecules VLA4 and VCAM1 or via cell surface molecules fractalkine (CX3CL1) and CX3CR1, on the surface of myogenic precursor cell and macrophage.

102. (new) Process for preparing pharmaceutical compositions according to claim 89, containing:

a first type of cells

and macrophages or macrophage-conditioned medium,
said process comprising contacting
a first type of cells, chosen among the group consisting
of precursor cells and stem cells,
and macrophages or macrophage-conditioned medium.

103. (new) The process for preparing pharmaceutical compositions according to claim 102 wherein said first type of cells and said macrophages or macrophage-conditioned medium are contacted for a time sufficient to allow at least one cycle of cellular division of said first type of cells.

104. (new) A product containing macrophages or a macrophage-conditioned medium and a first type of cells, being possibly precursor cells or stem cells, as a combined preparation for the separate, simultaneous or sequential administration of a cellular graft into a mammal.

105. (new) The product according to claim 104, wherein precursor cells are myogenic precursor cells.

106. (new) The product according to claim 104, where aliquots of the first type of cells and the macrophages are kept frozen in acceptable vehicle until thawing for the injection.